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PUBLIC NOTICE – ALL INTERESTED PARTIES

"Federal Motor Carrier Safety Regulations: Hazardous Materials Safety Permits" Final Rule

Environmental Assessment

Federal Motor Carrier Safety Administration

For further information, contact:
Charles Rombro, Team Leader, Regulatory Evaluation Team
Federal Motor Carrier Safety Administration
400 Seventh Street, SW
Washington, DC 20590
202-366-5615/Fax 202-493-0292

This Environmental Assessment evaluates the impacts of a final rule amending 49 CFR parts 385, 386, and 390. It was prepared in accordance with applicable environmental laws which ensure that environmental information is available to decision makers, regulatory agencies, and the public when Federal action is being considered. Combining thorough analysis of the final action with an examination of alternatives considered, including the No Action Alternative, this Environmental Assessment supports the agency's determination that the action being adopted will have no significant adverse environmental consequences.

June 30, 2004

FMCSA Finding of No Significant Impact (FONSI)

"PUBLIC NOTICE – ALL INTERESTED PARTIES"

FMCSA'S
FINDING OF NO SIGNIFICANT IMPACT
FOR
Federal Motor Carrier Safety Regulations
Hazardous Materials Safety Permits

In accordance with the National Environmental Policy Act of 1969 (NEPA) (P.L.. 91-90) and the Council of Environmental Quality Regulations dated 28 November 1978 (40 CFR parts 1500-1508), and the FMCSA Order 5610.1, this action has been thoroughly reviewed by the FMCSA and it has been determined, by the undersigned, that this project will have no significant impact on the human environment. Therefore, no Environmental Impact Statement (EIS) will be prepared.

This finding of no significant impact is based on the attached FMCSA prepared environmental assessment which has been determined to adequately and accurately discuss the environmental issues and impacts of the proposed action and provides sufficient evidence and analysis for determining that an environmental impact statement is not required.

1/20/04	Ralph Craft - for Chuck Rombro	Transportation Specialist
Date	Environmental Reviewer	Title/Position

I have considered the information contained in the environmental assessment, which is the basis for this finding of no significant impact. Based on the information in the environmental assessment and this finding of no significant impact document, I agree that the proposed action as described above, and in the environmental assessment, will have no significant impact on the environment.

1/20/04		Administrator
Date	Responsible Official	Title/Position

ENVIRONMENTAL ASSESSMENT
Hazardous Materials Carrier Permitting Program
Final Rule

I. Background

The National Environmental Policy Act of 1969 (NEPA) requires federal agencies to consider the consequences of major federal actions and to prepare a detailed statement on actions significantly affecting the quality of the environment. The FMCSA is requiring carriers of certain hazardous materials to obtain safety permits from the Department. This assessment determines the effects of the final rule on the environment and whether a more comprehensive environmental impact statement is required.

II. Purpose of Action

Federal hazardous materials transportation law, 49 U.S.C. 5101 *et seq.*, was enacted "to provide adequate protection against the risks to life and property inherent in the transportation of hazardous material in commerce . . ." (49 U.S.C. 5101). Certain provisions of this law apply only to the transportation of hazardous materials by motor vehicle, including §§ 5105(e), 5109, and 5119. The authority for implementing these provisions (except § 5109(f)) has been delegated to FMCSA (49 CFR 1.73(d)(2)). (This authority was transferred from the Federal Highway Administration (FHWA) to a separate Office of Motor Carrier Safety, 64 FR 56270 (Oct. 19, 1999), which became FMCSA on January 1, 2000. *See* 64 FR 72959 (Dec. 29, 1999), and 65 FR 220 (Jan. 4, 2000).)

Section 5109 requires DOT to issue regulations for safety permits for transporting certain hazardous materials. A motor carrier must hold a safety permit issued by DOT, and keep a copy of the permit or other proof of its existence in the vehicle, in order to transport certain hazardous materials in commerce or cause such materials to be transported in commerce by motor vehicle (49 U.S.C. 5109(a)). A person may not offer such hazardous materials for motor vehicle transportation in commerce unless the motor carrier has a safety permit (49 U.S.C. 5109(f)).

Under § 5109(b), a safety permit is required for the following four hazardous materials, above threshold amounts established by DOT. Section 5109(b) grants DOT discretion to prescribe additional hazardous materials, and the amount of each, to be subject to the safety permit requirement:

1. A Class A or B explosive;

2. Liquefied natural gas;

3. Hazardous material designated as extremely toxic by inhalation; and

4. A highway route-controlled quantity of radioactive material.

Other provisions in § 5109 require DOT to prescribe regulations for issuing safety permits, including application procedures; the duration, term, and limitations of a safety permit; other conditions needed to protect public safety; and procedures to amend, suspend, or revoke a safety permit. In order to issue a safety permit, DOT must find that the motor carrier is fit, willing, and able to: (1) provide the transportation to be authorized by the safety permit; (2) comply with Federal hazardous material transportation law and DOT's regulations under that law; and (3) comply with applicable Federal motor carrier safety laws and applicable minimum financial responsibility laws and regulations (49 U.S.C. 5109(a)).

Section 5119 requires the Secretary of Transportation to establish a working group of State and local government officials to establish uniform forms and procedures for the registration of persons that transport hazardous materials by motor vehicle, and to decide whether to limit the filing of State registration and permit forms and the collection of filing fees. The recommendations of the working group are to be included in a final report to the Secretary of Transportation. Finally, section 5119 requires the issuance of regulations implementing those recommendations with which the Secretary agrees.

The Alliance for Uniform HazMat Procedures (the Alliance) was the working group created to fulfill these requirements. The Alliance submitted its final report and recommendations to the agency on March 25, 1996. The agency announced and requested comments on the Alliance's report in a notice of report availability in the July 9, 1996, *Federal Register* at 61 FR 36016. Only 11 States responded to the notice, and they did not reach a clear consensus on what direction the agency should take.

III. Description of Action

This final rule establishes a safety permit program for motor carriers that transport in interstate or intrastate commerce any of the following hazardous materials:

1. Radioactive Materials - A highway route-controlled quantity of Class 7 materials;

2. Explosives – More than 25kg (55 pounds) of a Division 1.1, 1.2 or 1.3 material, or an amount of a Division 1.5 material requiring a placard under Part 172 Subpart F of this Subchapter;

3. Toxic by Inhalation (Division 2.3 and 6.1) Materials – Hazard Zone A materials in a packaging with a capacity greater than 1 liter (0.26 gallons); a shipment of Hazard Zone B materials in a bulk packaging (capacity greater than 450 L [119 gallons]); or a shipment of Hazard Zone C or D

materials in a bulk packaging having a capacity equal to or greater than 13,248 L (3,500) gallons.

4. A shipment of compressed or refrigerated liquid methane or natural gas or other liquefied gas with a methane content of at least 85% in a bulk packaging having a capacity equal to or greater than 13,248 L (3,500 gallons) for liquids or gases;

This slightly expands the statutorily mandated list of the materials. The safety permit program requires carriers of these materials to apply for and obtain a safety permit. Permits will be denied, suspended or revoked for violations of regulations, or if a company's safety rating falls below "Satisfactory." FMCSA may deny, suspend, or revoke a permit for a carrier that is deemed to be less than satisfactory in its safety performance. FMCSA has added multiple regulations relating to hazardous materials transportation and routing to the list of "acute" and "critical" violations. The list of acute and critical violations is relevant in the agency's determination of a carrier's safety fitness rating and, accordingly, the issuance of a safety permit.

In addition, this final rule requires new security tasks for carriers and drivers that transport permitted loads. A pre-trip inspection and certification is required of a motor vehicle used to transport a highway route controlled quantity of a Class 7 (radioactive) material. A driver who is transporting permitted materials must communicate with the carrier at least twice per day and the carrier must provide contact information to confirm the vehicle is within the general routing the company expected the shipment to be within.

IV. Options Considered

In developing this final rule, we initially considered four alternative lists of materials that would require a safety permit for transportation. The agency adopted in the final rule a list that slightly expands the option #2 statutorily mandated list of materials. The adopted list is very similar to option #2 insofar as anticipated impacts to the environment.

1 – Take No Regulatory Action

This option involves making no changes to the regulations.

2 – Use Statutory List of Materials

This option covers only the statutorily mandated list of hazardous materials (HM) comprised of only four materials under 49 US.C. 5109. This option would require a safety permit program for carriers of the following materials.

a. Any highway route-controlled quantity of Class 7 (radioactive) materials (RAM) as defined in § 173.403 of this title;

b. More than 55 pounds (25 kg) of Division 1.1, 1.2, or 1.3 (explosives) material;

c. More than one liter (1.08 quarts) per package of a "poisonous by inhalation (PIH)" material that meets the criteria for "hazard zone A," as specified in 49 CFR 173.116(a) or 173.133(a) of this title); or

d. A shipment of liquefied natural gas, defined as compressed or refrigerated liquid methane or natural gas, in a bulk packaging having a capacity equal to or greater than 13,248 L (3,500 gallons) for liquids or gases.

In addition, this option would require statutory provision to issue regulations requiring a pre-trip inspection and certification of a motor vehicle used to transport a highway route-controlled quantity of a Class 7 (radioactive) material.

3 – Use "Expanded" List of Materials

From a security viewpoint, FMCSA believes it is appropriate to expand the list of materials that Congress required to be permitted. This list is a possible expansion list for materials that could require permits:

a. Explosives Class 1.1 and 1.2 – in any quantity. These materials pose mass explosion and projection hazards.

b. Explosives Class 1.3 – in quantities over 55 pounds. These explosives pose a fire hazard and either a minor blast hazard or a minor projection hazard or both.

c. Explosives Class 1.5 – in quantities over 1,000 pounds. These explosives, while being insensitive and therefore not as much of a safety hazard, have mass explosion hazard when ignited. AMFO (ammonium nitrate/fuel oil mixture) that was used in the Oklahoma City bombing falls into this category.

d. All Poison by Inhalation Hazard (PIH) materials in the following quantities:

   - PIH Zone A (LC50 less than or equal to 200 ppm) – in any quantity.
   - PIH Zone B (LC50 greater than 200 ppm but less than or equal to 1,000 pm) – in quantities exceeding 119 gallons per vehicle.
   - PIH Zones C&D (LC50 greater than 1,000 ppm but less than or equal to 5,000 ppm) – in quantities exceeding 3,500 gallons per vehicle.

e. Anhydrous ammonia – in quantities exceeding 3,500 gallons per vehicle. Although anhydrous ammonia does not technically have a PIH Zone, it does have a LC50 between 3,000 and 5,000 ppm and is very close to being a flammable gas.

f. Radioactive Materials (RAM) in quantities that require compliance with "exclusive use" regulations in 49 CFR 173.427(a). This would include highway route-controlled quantities required by law as well as other RAM that could be used to create a "dirty bomb."

g. Flammable Gases (Division 2.1 materials) – in a bulk packaging having a capacity equal to or greater than 13,248 L (3,500 gallons) for liquids or gases.
Note: This category also includes shipments of liquefied natural gas, defined as compressed or refrigerated liquid methane or natural gas.

h. Poisonous materials (Division 6.1) that are in Packing Group I – in quantities over 3,500 gallons.

i. Infectious Substances (Division 6.2) that are on the Centers for Disease Control and Prevention (CDC) list of Select Agents that could be used as weapons of mass destruction – in any quantity except laboratory samples.

j. Organic Peroxides that are type B and temperature controlled – in any quantity.

The expanded list covers more HM than the statutory list and consequently affects more HM carriers. In addition, this option would require statutory provision to issue regulations requiring a pre-trip inspection and certification of a motor vehicle used to transport a highway route controlled quantity of a Class 7 (radioactive) material.

4 – Use HM-232 List of Materials

This option would significantly expand the list of materials covered under the HM permit to include all HM covered under the Research and Special Programs Administration (RSPA) proposed rule HM-232. It would apply to shippers and carriers that are required to register with RSPA under the Federal Hazardous Material Transportation law (49 CFR part 107, subpart G). In effect, this registration includes all carriers who transport placarded HM. Thus, under this option, FMCSA would issue permits to carriers of the following types and quantities of HM:

a. A highway route-controlled quantity of a Class 7 (radioactive) material, as defined in 49 CFR 173.403.

b. Any quantity of Division 1.1 or 1.2 (explosive) material (see 49 CFR 173.50) in a motor vehicle.

c. Explosives Class 1.3 – in quantities over 55 pounds. These explosives pose a fire hazard and either a minor blast hazard or a minor projection hazard or both

d. More than one liter (1.06 quarts) per package of a "material extremely toxic by inhalation" (that is, a "material poisonous by inhalation," as defined in 49 CFR 171.8, that meets the criteria for "hazard zone A" as specified in 49 CFR 173.116(a) for gases or 173.133(a) for liquids).

e. A hazardous material (including hazardous wastes) in a bulk packaging having a capacity equal to or greater than 13,248 liters (3,500 gallons) for liquids or gases or more than 13.24 cubic meters (468 cubic feet) for solids.

f. A shipment in other than a bulk packaging of 2,268 kilograms (5,000 pounds) gross weight or more of one class of hazardous materials (including hazardous wastes) for which placarding of a vehicle, rail car, or freight container is required for that class.

g. A quantity of hazardous material that requires placarding.

In addition, this option would require statutory provision to issue regulations requiring a pre-trip inspection and certification of a motor vehicle used to transport a highway route controlled quantity of a Class 7 (radioactive) material.

V. Environmental Impacts of Options

Take No Regulatory Action:
This option would not implement changes to the regulations, thus would not require carriers of any materials to obtain a permit. There would be no change in environmental impacts.

Require Permitting for the Various Lists of Materials:
Options 2, 3, 4, and the slightly expanded list that is adopted in the final rule all include requiring permits and only vary in the materials that would require a permit.

Effects of the Permit Application and Issuance Process: The actual act of issuing the permit does not affect the environment except for the paper and energy required to print a permit and send it to the recipient. The application process for the permit does not affect the environment except for the paper and energy required to submit the various forms (Form MCS-150B—HM Permit Application, and for a new entrant carrier, Form MCS-150A—Safety Certification for Application for U.S. DOT Number). FMCSA combined forms to reduce the amount of paperwork, and these forms can also be completed through a paperless format via the internet. The criteria for issuing a permit, which will then allow for

subsequent transportation of these specified materials, however, screens potential recipients for past violations and incidents that involve releases of hazardous materials to the environment. Applicants with a history of high accident-to-driver ratios or other safety concerns will be denied a permit.

Effects of the Security Program: This rule requires a carrier to have a security plan meeting the requirements of 49 CFR part 172, subpart I, a plan to communicate with each motor vehicle driver at least twice per day, and security training for hazmat employees. RSPA issued the regulations (HM-232) for the security plan in Part 172 in addition to the security training for hazmat employees. RSPA conducted an Environmental Assessment for that rule, which can be found under Docket No. RSPA-2002-12064 on the DOT Docket Management System. The docket is web accessible at http://dms.dot.gov/search/searchFormSimple.cfm. RSPA's findings from this assessment resulted in a moderately positive environmental impact and a Finding of No Significant Impact to the Environment.

Hazardous Materials and the Environment: Substances that meet the definition of a hazardous material according to the Hazardous Materials Regulations (HMR) (49 CFR parts 171-180) may present an immediate threat to safety while in transportation, but also can damage ecosystems through water, air, and ground pollution, as well as cause direct poisoning of plants and animals. Hazardous materials include poisonous gases and liquids, radioactive materials and highly volatile chemicals that contribute to a range of air pollution, including greenhouse gases. In addition, the Environmental Protection Agency's list of Hazardous Substances and Reportable Quantities (42 U.S.C. § 9601(14)) are defined as hazardous materials (49 CFR § 171.8) and include bio-accumulative toxins and radionuclides. When transported by water, substances on the list of Marine Pollutants (appendix B to 49 CFR § 172.101) also meet the definition of hazardous material. The Marine Pollutants list includes materials known to, in small amounts, contaminate large amounts of water. Thus, it is safe to assume that if a material is defined as a "hazardous material" by Title 49 of the CFR, then the material also presents a potential danger to ecosystems.

Reducing Hazardous Materials Incidents: Minimizing the release of hazardous materials during transportation is a direct benefit for the environment. The HMR regulate the packaging, loading, unloading, and identification of hazardous materials. These regulations require packaging containing hazardous materials to meet stringent testing requirements to prevent releases during events normal to transportation -- dropped packaging, vibrations over long highway transit, normal handling and movement through the transportation system. However, accidents still occur where hazardous materials are released to the environment. In the year 2000, over 17,300 incidents were reported to DOT's Hazardous Materials Information System, the highest number since record keeping began in 1991. Many of these incidents involve situations beyond events normal to transportation, such as auto accidents. But many also involve improperly closed packaging and other violations of the HMR. For bulk highway packaging, such

as cargo tanks, an improperly closed valve or other violation of the cargo tank regulations can potentially be an environmental disaster, as these bulk packagings contain a greater quantity of materials.

The permitting program will screen candidates carrying these high-hazard materials to prevent carriers with known safety problems from being allowed to carry these materials. Similarly, if a permitted carrier develops safety problems, the permit can be suspended or revoked.

Safety Permitting and Reducing Incidents: The security, safety and environmental protection aspects of this rule involve a common goal: preventing the release of hazardous materials. All are goals of the Department. Thus, creating a permit process for certain high-hazard materials not only improves security and safety, but subsequently protects the environment by preventing releases.

The permit process will prevent carriers that have not been issued a "Satisfactory" safety rating from carrying these high-hazard materials. The safety rating is assigned by FMCSA, pursuant to the Safety Fitness Procedures under 49 CFR part 385, or by the State in which the motor carrier has its principal place of business, if the State has adopted and implemented safety fitness procedures that are equivalent to the procedures in 49 CFR part 385, subpart A. The safety rating is determined by a number of factors including violations of safety regulations and accidents. A carrier without a "Satisfactory" safety rating can be considered more likely to violate a regulation that leads to a release of hazardous materials, or to be involved in accidents which lead to releases. For example, violating cargo tank regulations may result in a faulty valve that fails during transportation, resulting in a release of thousands of gallons of an environmental contaminant into a local watershed. By withholding permits from carriers that have not been issued a "Satisfactory" safety rating, the Department estimates that it can reduce the number of possible incidents with these high-hazard materials.

In addition, the security plans and vehicle checks for radioactive materials required by Options 2, 3, 4, and the slightly expanded list adopted by the final rule, reduce the possibility of these materials being involved in an accident or being used for nefarious purposes to endanger human health, property, or the environment.

Differences of Options 2 – 4:
The list of materials adopted in the final rule is a slightly expanded list of option #2. The basic requirements for each option remain the same and vary only by the types and quantities of materials that would fall under the permit process. Thus, the more complete the list of materials requiring a permit, which screens out carriers lacking a "Satisfactory" safety rating, the greater the probability that higher-hazard materials will be transported by carriers that are unlikely to be

involved in accidents or found in violation of safety regulations that may result in environmental damage from a release.

VI. Clean Air Act Conformity Requirements

The general conformity rule establishes the procedures and criteria for determining whether certain Federal agency actions conform to State or Federal (EPA-issued) air quality implementation plans. To determine whether conformity requirements apply to a proposed Federal agency action, the following must be considered: the non-attainment or maintenance status of the area; the project's emission levels; exemptions from conformity and presumptions to conform; and the regional significance of the project's emissions.

The general conformity rule covers direct emissions of criteria pollutants or their precursors from Federal agency actions as well as indirect emissions that are reasonably foreseeable, and can practicably be controlled and maintained by the Federal agency through continuing program responsibility.

FMCSA has analyzed this rule under the Clean Air Act, as amended (CAA) section 176(c), (42 U.S.C. 7401 *et seq.*) and implementing regulations promulgated by the Environmental Protection Agency. We are required to perform a conformity analysis of the CAA according to the procedures outlined in our environmental procedures Order 5610.1 Appendix 14.

The permit program, which does not impose significant costs to carriers, merely assures that carriers of higher-hazard materials maintain satisfactory crash ratings and allows FMCSA to prevent poor performing carriers from transporting these materials. In addition, the rule contains several security-related requirements. We are not requiring any changes that will alter CMV routing, mileage, time of transportation, or operation of fleet-mix. This rule may provide air quality benefits attributable to a reduction in the number of accidental or purposeful releases of toxic inhalation hazard materials, methane, and other hazardous materials covered by the permit program.

We have determined that this rule will not result in any emissions increase nor will it have any potential to result in emissions that are above the general conformity rule's *de minimis* emission threshold levels. Moreover, it is reasonably foreseeable that the rule change will not increase total CMV mileage, change the time of day when, or how, CMVs operate, the routing of CMVs, or the CMV fleet-mix of motor carriers.

VII. Conclusion

Enacting a permitting process of the slightly expanded list of option #2 will result in a reduction of incidents and an increase in environmental protection due to the prevention of the release of hazardous materials by carriers with safety problems.

Based on the analysis of the proposed rule and the final rule, we have determined that there are no significant environmental impacts associated with this action.